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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,156	07/31/2001	Dany Berube	P015.01	3895

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AFX INC.  
47929 FREMONT BLVD  
FREMONT, CA 94538

EXAMINER

PEFFLEY, MICHAEL F

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 12/12/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/904,156

Applicant(s)

BERUBE, DANY

Examiner

Michael Peffley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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Applicant's amendments and comments, received November 7, 2003, have been fully considered by the examiner. The following is a complete response to the November 7, 2003 communication.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 6 remain unclear with the recitation of a "relatively uniform electromagnetic field pattern". A comparison has not been established to define what is meant by "relatively uniform". See MPEP 2173.05(b)(F).

***Claim Rejections - 35 USC § 102***

Claims 1, 2, 5, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Walinsky et al ('649).

Walinsky et al disclose a flexible ablation apparatus which includes a flexible body (208) comprising a coaxial delivery cable (210) connected to a high frequency energy source. Further, the device includes a monopole antenna (215) at the distal tip of the device. The examiner maintains that the device has a predetermined shape including a tapered portion (see Figure 5c), and since there is no particular definition of what is meant by "relatively uniform electromagnetic field pattern" the Walinsky et al antenna is deemed to meet this limitation.

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***Claim Rejections - 35 USC § 103***

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walinsky et al ('649) in view of the teachings of Lenihan et al ('382) and Larsen (018).

Walinsky et al fail to disclose an encapsulation for the antenna tip.

Lenihan et al disclose a microwave antenna device, and specifically teach that it is known to encapsulate the antenna with a material such as silicone (col. 3, lines 65-68). The examiner maintains that the use of TEFLON as a suitable dielectric coating is generally well known in the antenna art, and Larsen provides evidence of this assertion (col. 5, line 44). It is also noted that Lenihan et al state that the Walinsky et al monopole antenna provides a uniform field pattern (see col. 2, lines 30-36).

To have provided the Walinsky et al antenna with a TEFLON coating to make it more biocompatible would have been an obvious modification for one of ordinary skill in the art, particularly since Lenihan et al teach that it is generally known to encapsulate microwave antennas and further since Larsen teaches of the well known use of TEFLON as a biocompatible dielectric material used in antenna devices.

Claims 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walinsky et al ('649) in view of the teaching of Moss et al ('803).

While Walinsky et al teach of sensing electrophysiological signals with electrodes (col. 4, lines 30-36), but fail to teach of providing the sensing electrodes on the catheter body.

Moss et al disclose an antenna device and specifically teach that it is known to

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provide ring electrodes (230,234) on the catheter device for sensing electrophysiological signals.

To have provided the Walinsky et al device with electrodes on the catheter surface for sensing electrophysiological signals would have been an obvious modification for one of ordinary skill in the art in view of Moss et al.

### ***Response to Arguments***

Applicant's arguments filed November 7, 2003 have been fully considered but they are not persuasive.

With regard to the 35 USC 112, second paragraph rejection, applicant contends that the amendment to the claim to define the electromagnetic pattern with respect to the monopole antenna has obviated this rejection. The examiner disagrees. As set forth in the rejection, it is not clear what constitutes a "relatively uniform" electromagnetic field pattern, particularly since there has been no comparison established. In view of the specification's lack of a definition for "relatively uniform", it is impossible to determine the scope of the claim and it is also impossible to establish that applicant's electromagnetic pattern is more or less uniform than the prior art (i.e. Walinsky et al) electromagnetic field pattern.

Next, applicant contends that the 35 USC 102 rejection of the claims as being anticipated by Walinsky et al is not tenable. In particular, applicant asserts that the current densities created by the Walinsky et al device are not uniform across the antenna. Applicant has not pointed to any specific claimed structure which is different from that disclosed in the Walinsky et al device. The Walinsky et al device clearly

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includes a monopole antenna which has a predetermined, tapered shape (Figure 5c). As such, this identical structure would yield similar, if not identical, results. There is nothing in Walinsky et al which suggests that a non-uniform pattern is created, and nothing in the claimed structure which differentiates the claimed invention from the Walinsky et al device. Moreover, applicant's specification fails to adequately and clearly define what is meant by a "relatively uniform" pattern as addressed in the 35 USC 112, second paragraph rejection.

Applicant then goes on to point out that with regard to the shapes shown in Figure 5 of the Walinsky et al patent, Walinsky et al state that these shapes are less well adapted to catheter use than the antennas shown in Figure 6. Applicant asserts that such a statement teaches away from using the shapes of Figure 5 in a catheter device. First, it is noted that the current application claims do not recite a catheter and such an argument is moot. Second, the examiner maintains that while Walinsky et al indicate that such shapes are less well adapted for use in a catheter device, this is not the same as stating that they can not be used in catheter devices. In as much as the Walinsky et al device is a catheter device, these shapes are clearly for use with a catheter even though they may not be as maneuverable as the straight antenna configuration.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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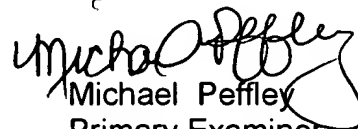
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (703) 308-4305. The examiner can normally be reached on Mon-Fri from 6am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

  
Michael Peffley  
Primary Examiner  
Art Unit 3739

mp  
December 10, 2003